



Environmental Bulletin

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from the Savannah River Site

Pre-Construction Fact Sheet Available for the A Area Burning/Rubble Pits (731-A, -1A) and Rubble Pit (731-2A) and the Miscellaneous Chemical Basin/Metals Burning Pit (731-4A, -5A) Operable Unit

The United States Department of Energy (DOE), the United States Environmental Protection Agency – Region 4, and the South Carolina Department of Health and Environmental Control announce the availability of a Pre-Construction Fact Sheet, which provides background information and describes the remedial action selected for the A Area Burning/Rubble Pits (731-A, -1A) and Rubble Pit (731-2A) (ABRP) and the Miscellaneous Chemical Basin/Metals Burning Pit (731-4A, -5A) (MCB/MBP) Operable Unit (OU) at the Savannah River Site (SRS). The ABRP/MCB/MBP OU is located in the northwest portion of SRS, approximately 3 miles east of the SRS boundary and 1.5 miles south of M Area.

The remedial actions selected in the Record of Decision are:

- 1. Burning/Rubble Pits (731-A, -1A), Potential Pit, Depressional Area, Ash Scatter Area/Ditch – No Action:** No constituents of concern (COCs) were identified for these areas; therefore, the preferred remedial alternative is No Action.
- 2. Rubble Pit (731-2A) and A-Area Ash Pile (788-2A) – Soil Cover and Institutional Controls:** A soil cover to address benzo(a)pyrene surface contamination was placed over Rubble Pit 731-2A under an interim action. This action was sufficient as the final remedy for Rubble Pit 731-2A; therefore, no additional actions are required. A soil cover was selected for the A Area Ash Pile due to human health and ecological COCs. The A Area Ash Pile COCs include arsenic, coal-related radionuclides, and selenium. Institutional controls (i.e., warning signs, land-use restrictions, etc.) help prevent exposure to contaminated soil in both subunits.
- 3. ABRP Trench and MCB Vadose Zone – Soil Vapor Extraction and Institutional Controls:** Soil vapor extraction was selected for these areas to remediate the volatile organic compounds (VOCs) in the subunits. Trichloroethane (TCE) is present in the ABRP Trench Vadose Zone; and, TCE and tetrachloroethylene (PCE) are present in the MCB Vadose Zone. Institutional controls (i.e., warning signs, land-use restrictions, etc.) help prevent exposure to contaminated soil in both subunits.
- 4. MCB Surface Soil and MBP Surface Soil – Excavation, Offsite Disposal, and Backfill:** The MCB surface soil contained polychlorinated biphenyls that exceeded human health and ecological remedial goals. The MBP surface soil contained aluminum in concentrations that exceeded the ecological remedial goal. The contaminated soils in both subunits were excavated, sent offsite for disposal, and the areas were backfilled under an interim action. The remedial actions in these areas were sufficient as the final remedial action; therefore, no additional actions are required.

Between 1951 and 1973, Pits 731-A and 731-1A were used to burn paper, plastics, wood, rubber, rags, cardboard, oil, degreasers, and solvents. Combustible materials were burned monthly. Pit 731-2A was only used as a rubble pit. After burning was discontinued in 1973, Pits 731-A and 731-1A were also converted to rubble pits and used to dispose of concrete rubble, bricks,

tile, asphalt, plastic, metal, wood products, and rubber. When the pits were filled to capacity, they were covered with compacted clay-rich native soil and vegetation was established. The actual closing date is not recorded; however, the estimated time is 1978. Other potential sources of contamination identified as part of the ABRP area include a Potential Pit, Depressional Area, Trench, Ash Scatter Area/Ditch. Specific disposal records are not known to exist for these subunits.

The A Area Ash Pile (788-2A), used for the disposal of dry ash from the A Area powerhouse prior to 1994, covers approximately 2 acres and is about 20 feet thick. The A Area Ash Pile is located between the Pits Area and the Ash Scatter Area/Ditch subunits. The Trench subunit extends beneath the Ash Pile.

The MCB received liquid chemical wastes and is located in an old borrow pit. No construction records exist for the borrow pit. No records of specific materials disposed were kept, although its presumed use was for the disposal of solvent and used oil.

The MBP was a cleared area that was used for burning lithium-aluminum alloys, scrap, and cuttings from A & M Area operations. Unit photographs show what is thought to be typical disposal of metal shavings, pieces of aluminum, plastic pipe, metal drums, and other miscellaneous scrap. The site was reportedly placed into service in 1960 and taken out of service in 1974. At that time, the waste piles were regraded and the area was allowed to revegetate with natural flora.

Groundwater is not considered part of the scope for the ABRP/MCB/MBP OU. Any groundwater contamination resulting from the ABRP/MCB/MBP OU is regulated by the SRS RCRA Part B Permit.

The Pre-Construction Fact Sheet for the ABRP/MCB/MBP OU is available at the following locations:

- DOE Public Reading Room - Gregg-Graniteville Library - University of South Carolina-Aiken campus in Aiken, SC;
- Thomas Cooper Library Government Documents Department - University of South Carolina in Columbia, SC;
- Reese Library - Augusta State University in Augusta, GA; and
- Asa H. Gordon Library - Savannah State University in Savannah, GA.

For additional information, contact Paul Sauerborn at 1-800-249-8155 or e-mail: paul.sauerborn@srs.gov

Current National Environmental Policy Act Actions Affecting SRS

- ***Disposition of Scrap Metals Programmatic Environmental Impact Statement (PEIS) (DOE/EIS-0327)***

DOE will evaluate alternatives for disposition of scrap metals that may have been in radiological areas. The disposition options to be analyzed include continuation of the suspension on unrestricted release of metals for recycling, unrestricted release of scrap metals for recycling, and disposal. The notice of intent (NOI) for this PEIS was issued on July 12, 2001. A public scoping meeting was held on July 31, 2001, in North Augusta, South Carolina. The draft PEIS has not been issued, and the schedule is uncertain.

- ***Supplement to the Stockpile Stewardship and Management Programmatic Environmental Impact Statement - Complex 2030 (DOE/EIS-0236-S4)***

The National Nuclear Security Administration (NNSA) will prepare a supplement to the Stockpile Stewardship and Management Programmatic EIS to address the environmental impact from the continued transformation of the nuclear weapons complex by implementing NNSA's vision of the complex as it would exist in 2030 - Complex 2030, as well as alternatives. The existing SRS tritium operations, including the Tritium Extraction Facility, would be part of the No Action alternative; that is, those operations would continue at SRS as part of Complex 2030. SRS would also be an alternative site for a Consolidated Plutonium Center for long-term research and development, surveillance, and manufacturing operations for a baseline capacity of 125 pits per year. A scoping meeting for the EIS was held on November 9, 2006, in North Augusta, SC. The Modern Pit Facility EIS was cancelled with the notice of intent to prepare the Complex 2030 EIS. DOE plans to make the draft EIS available for public comment in September 2007. The final PEIS and ROD are scheduled to be available in May and June 2008, respectively.

- ***EIS for the Global Nuclear Energy Partnership Technology Demonstration Program (GNEP) (DOE/EIS-0396)***
DOE will evaluate technologies that would change the way spent nuclear fuel from commercial light-water power reactors is managed. GNEP includes project-specific proposals to construct and operate three facilities. The proposed nuclear fuel recycling center would separate the spent nuclear fuel (SNF) into its reusable and waste components and manufacture new nuclear fuel using reusable components that still have the potential for use in nuclear power generation. The proposed advanced recycling reactor would destroy long-lived radioactive elements in the fuel while generating electricity. The GNEP PEIS will consider 13 sites as possible locations for one or more of these facilities, as well as alternative technologies to be used in these facilities. The advanced fuel cycle research facility would perform research into SNF recycling processes and other aspects of advanced nuclear fuel cycles. There are six candidate DOE sites, including SRS, for this facility. The draft PEIS is scheduled to be available in October 2007 and the final and ROD in May and June 2008, respectively.

- ***Supplemental EIS for Surplus Plutonium Disposition (DOE/EIS-0283-S2)***
DOE will prepare a SEIS to evaluate the potential environmental impacts of plutonium disposition capabilities that would be constructed and operated at SRS. DOE's preferred alternative is to construct and operate a vitrification facility within an existing building at SRS. This facility would immobilize plutonium within a lanthanide borosilicate glass inside stainless steel cans. The cans then would be placed within larger canisters to be filled with vitrified high-activity radioactive waste in the Defense Waste Processing Facility (DWPF). The canisters would be suitable for storage in a geologic repository. DOE would also prepare some of the surplus plutonium for disposal by processing it in the H Canyon at SRS, then sending it to the liquid radioactive waste tanks and to DWPF. The draft EIS is scheduled to be available in January 2008 and the final and ROD in July and August 2008, respectively.

- ***EIS for the Disposal of Greater-Than-Class-C Low-Level Radioactive Waste (GTCC LLW) (DOE/EIS-0375)***
DOE will evaluate GTCC LLW disposal in a geologic repository, in intermediate depth boreholes, and in enhanced near surface disposal facilities. Candidate locations for these disposal facilities would be: the Idaho National Laboratory in Idaho; the Los Alamos National Laboratory and Waste Isolation Pilot Plant in New Mexico; the Nevada Test Site and the proposed Yucca Mountain repository in Nevada; the Savannah River Site in South Carolina; the Oak Ridge Reservation in Tennessee; and the Hanford Site in Washington. DOE would also evaluate generic commercial disposal at arid and humid locations. In addition, DOE proposes to include DOE LLW and transuranic waste having characteristics similar to GTCC LLW and which may not have an identified path to disposal (hereafter referred to as GTCC-like waste) in the National Pollutant Discharge Elimination System (NPDES) Stormwater Compliance Alternatives (**DOE/EA-1563**)

DOE analyzed potential environmental consequences of the proposed National Pollutant Discharge Elimination System (NPDES) Stormwater Compliance Alternatives. The South Carolina Department of Health and Environmental Control (SCDHEC) has renewed the NPDES General Industrial Activity Stormwater Permit that regulates certain SRS stormwater discharges. This permit authorizes the continued discharge of stormwater effluents from SRS operations through 39 outfalls from industrial areas into State surface waters for the next four years. In order to meet the more restrictive conditions of the reissued permit, compliance schedules will be negotiated, as needed, for certain outfalls as designated by SCDHEC. A finding of no significant impact (FONSI) was issued in June 2007. Therefore updates regarding **DOE/EA-1563** will not appear in future publications of the *Environmental Bulletin*. An electronic copy of the final EA and FONSI may be viewed by directing your browser to <http://www.srs.gov/general/pubs/envbul/nepa1.htm>.

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Savannah River Site
Building 730-1B**



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For more information on this or other
environmental and compliance activities
at SRS, please contact:

Paul Sauerborn

Washington Savannah River Co.

Aiken, S.C. 29808

(803) 952-6658

paul.sauerborn@srs.gov

The SRS Environmental Bulletin
Savannah River Site
Building 730-1B
Aiken, S.C. 29808